COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 16:30:37 ON 14 NOV 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 NOV 2004 HIGHEST RN 780001-49-2
DICTIONARY FILE UPDATES: 12 NOV 2004 HIGHEST RN 780001-49-2

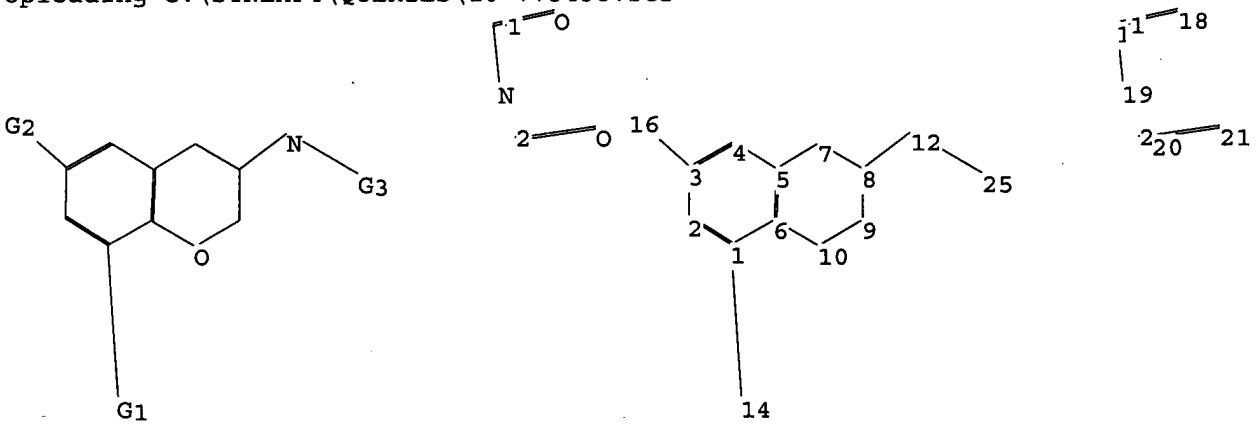
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\STNEXP4\QUERIES\10-775438.str



chain nodes :
12 14 16 17 18 19 20 21 25
ring nodes :
1 2 3 4 5 6 7 8 9 10

```
chain bonds :
1-14  3-16  8-12  12-25  17-18  17-19  20-21
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-10  7-8  8-9  9-10
exact/norm bonds :
1-14  3-16  8-12  12-25  17-18  17-19  20-21
exact bonds :
5-7  6-10  7-8  8-9  9-10
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6
isolated ring systems :
containing 1 :


G1:C,N

G2:H,X,Cy,CN,C

G3:SO2,[*1],[*2]

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
12:CLASS  14:CLASS  16:CLASS  17:CLASS  18:CLASS  19:CLASS  20:CLASS  21:CLASS
25:CLASS



L1      STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l1 ful
FULL SEARCH INITIATED 16:30:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   2115 TO ITERATE

100.0% PROCESSED    2115 ITERATIONS                          45 ANSWERS
SEARCH TIME: 00.00.01

L2           45 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               155.42     155.63

FILE 'CAPLUS' ENTERED AT 16:30:58 ON 14 NOV 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
```

FILE COVERS 1907 - 14 Nov 2004 VOL 141 ISS 21
FILE LAST UPDATED: 12 Nov 2004 (20041112/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

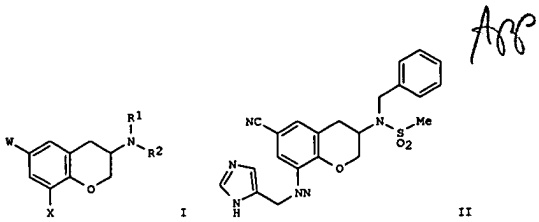
=> s l2
L3 12 L2

=> d ibib abs hitstr tot

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:759872 CAPLUS
DOCUMENT NUMBER: 141:277622
TITLE: Preparation of substituted N-(chroman-3-yl)methanesulfonamides as inhibitors of farnesyl protein transferase for treating cancer
INVENTOR(S): Bhide, Rajeev S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004181068	A1	20040916	US 2004-775438		20040210
PRIORITY APPLN. INFO.:			US 2003-447513P	P	20030214

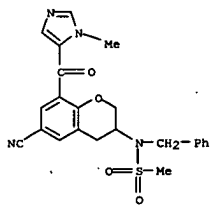
GI



I II

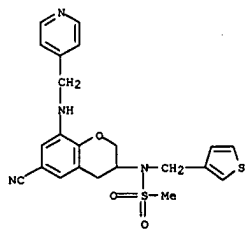
AB The title compds. I [W = H, halo, CN, alkyl, alkynyl, cycloalkyl, heterocyclyl, (hetero)aryl; R1 = alkyl, alkynyl, cycloalkyl, heterocyclyl, aralkyl, heteroaryl, heteroarylalkyl; R2 = SO2R3, SO2NR4R5, C(O)NR6R7, C(O)R8; X = NR9R10, CR11R12R13; R3 = alkyl, alkynyl, cycloalkyl, heterocyclyl, (hetero)aryl; R4-R10 = H, alkyl, cycloalkyl, acyl, etc.; R12-R13 = H, alkyl, cycloalkyl, aryl, etc.] which are novel inhibitors of farnesyl protein transferase and ras protein farnesylation, and are useful in treating diseases associated with farnesyl protein transferase, such as cancer, were prepared E.g., a multi-step synthesis of II, starting from 5-bromosalicyldehyde and nitroethanol, was given. The compds. I are inhibitors of farnesyl transferase with IC50 values between 1 nM and 100 μM. The pharmaceutical compns. comprising the compds. I are disclosed.
IT **757956-47-1P 757956-51-7P 757956-53-9P**

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1-methyl-1H-imidazol-5-yl)carbonyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



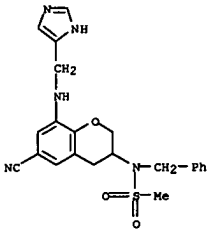
● HCl

RN 757956-57-3 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(4-pyridinylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(3-thienylmethyl)- (9CI) (CA INDEX NAME)



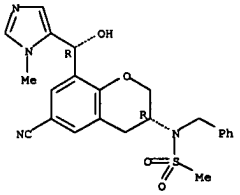
RN 757956-58-4 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[methyl(4-pyridinylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
757956-57-3P 757956-58-4P 757956-62-0P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of substituted N-(chroman-3-yl)methanesulfonamides as inhibitors of farnesyl protein transferase for treating cancer)
RN 757956-47-1 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1H-imidazol-4-ylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



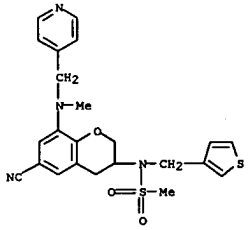
RN 757956-51-7 CAPLUS
CN Methanesulfonamide, N-[(3R)-6-cyano-3,4-dihydro-8-[(R)-hydroxy(1-methyl-1H-imidazol-5-yl)methyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



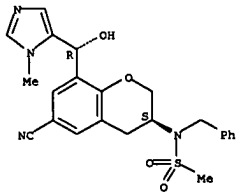
RN 757956-53-9 CAPLUS

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



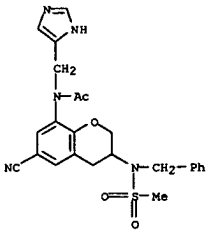
RN 757956-62-0 CAPLUS
CN Methanesulfonamide, N-[(3S)-6-cyano-3,4-dihydro-8-[(R)-hydroxy(1-methyl-1H-imidazol-5-yl)methyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



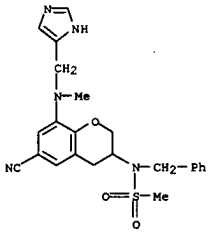
IT **757956-48-2P 757956-49-3P 757956-50-6P 757956-52-8P 757956-54-0P 757956-55-1P 757956-56-2P 757956-59-5P 757956-60-8P 757956-61-9P 757956-63-1P 757956-75-5P 757956-76-6P 757956-77-7P 757956-78-8P 757956-81-3P 757956-83-5P 757956-86-8P 757956-87-9P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted N-(chroman-3-yl)methanesulfonamides as inhibitors of farnesyl protein transferase for treating cancer)
RN 757956-48-2 CAPLUS
CN Acetamide, N-[6-cyano-3,4-dihydro-3-[(methylsulfonyl)(phenylmethyl)amino]-2H-1-benzopyran-8-yl]-N-(1H-imidazol-4-ylmethyl)-, monohydrochloride (9CI)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
(CA INDEX NAME)



● HCl

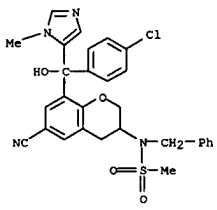
RN 757956-49-3 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1H-imidazol-4-ylmethyl)methylamino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

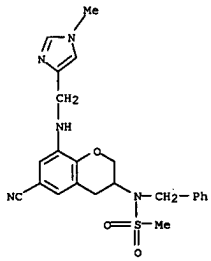
RN 757956-50-6 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1H-imidazol-4-

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN Methanesulfonamide, N-[8-[(4-chlorophenyl)hydroxy(1-methyl-1H-imidazol-5-yl)methyl]-6-cyano-3,4-dihydro-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



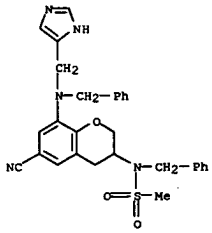
● HCl

RN 757956-55-1 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[[(1-methyl-1H-imidazol-4-yl)methyl]amino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 757956-56-2 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[methyl[(1-methyl-1H-imidazol-4-yl)methyl]amino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

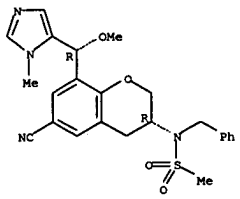
L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
ylmethyl)(phenylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 757956-52-8 CAPLUS
CN Methanesulfonamide, N-[(3R)-6-cyano-3,4-dihydro-8-[(R)-methoxy(1-methyl-1H-imidazol-5-yl)methyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

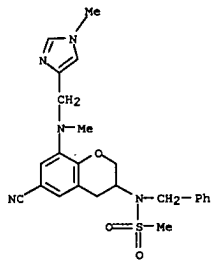
Relative stereochemistry.



● HCl

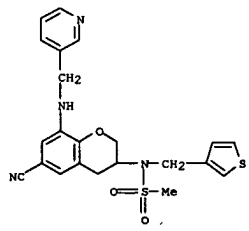
RN 757956-54-0 CAPLUS

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



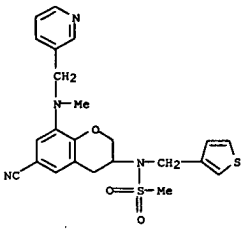
● HCl

RN 757956-59-5 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(3-pyridinylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

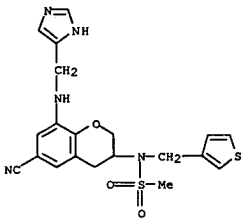


RN 757956-60-8 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[methyl(3-pyridinylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



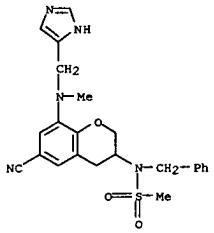
RN 757956-61-9 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1H-imidazol-4-ylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(3-thienylmethyl)- (9CI) (CA INDEX NAME)



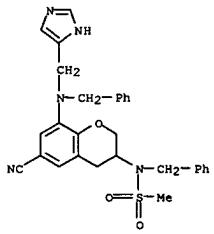
RN 757956-63-1 CAPLUS
CN Methanesulfonamide, N-[(3S)-6-cyano-3,4-dihydro-8-[(R)-methoxy(1-methyl-1H-imidazol-5-yl)methyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

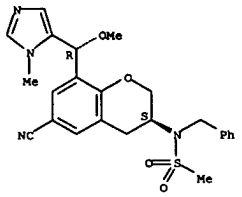


RN 757956-77-7 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1H-imidazol-4-ylmethyl)(phenylmethyl)amino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



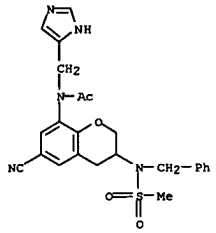
RN 757956-78-8 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[hydroxy(1-methyl-1H-imidazol-5-yl)methyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



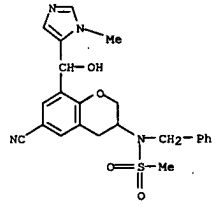
● HCl

RN 757956-75-5 CAPLUS
CN Acetamide, N-[6-cyano-3,4-dihydro-3-[(methylsulfonyl)(phenylmethyl)amino]-2H-1-benzopyran-8-yl]-N-(1H-imidazol-4-ylmethyl)- (9CI) (CA INDEX NAME)

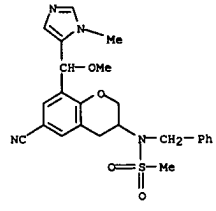


RN 757956-76-6 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1H-imidazol-4-ylmethyl)methylamino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

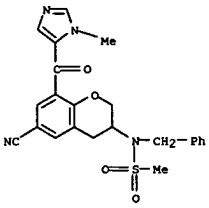


RN 757956-81-3 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[methoxy(1-methyl-1H-imidazol-5-yl)methyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

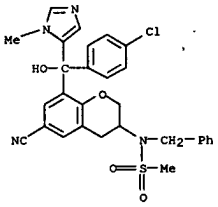


RN 757956-83-5 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[(1-methyl-1H-imidazol-5-yl)carbonyl]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

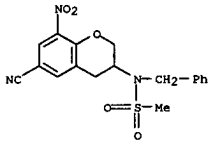


RN 757956-86-8 CAPLUS
CN Methanesulfonamide, N-[8-[(4-chlorophenyl)hydroxy(1-methyl-1H-imidazol-5-yl)methyl]-6-cyano-3,4-dihydro-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

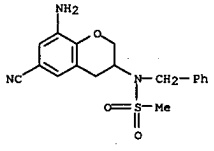


RN 757956-87-9 CAPLUS
CN Methanesulfonamide, N-[6-cyano-3,4-dihydro-8-[methyl[(1-methyl-1H-imidazol-4-yl)methyl]amino]-2H-1-benzopyran-3-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

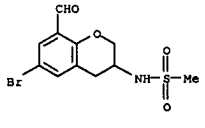
L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 757956-70-0 CAPLUS
CN Methanesulfonamide, N-(8-amino-6-cyano-3,4-dihydro-2H-1-benzopyran-3-yl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

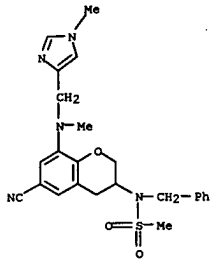


RN 757956-71-1 CAPLUS
CN Methanesulfonamide, N-(6-bromo-8-formyl-3,4-dihydro-2H-1-benzopyran-3-yl)- (9CI) (CA INDEX NAME)



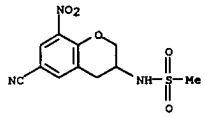
RN 757956-72-2 CAPLUS
CN Methanesulfonamide, N-(6-bromo-8-formyl-3,4-dihydro-2H-1-benzopyran-3-yl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



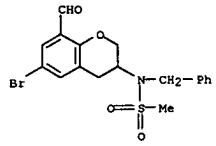
IT 757956-68-6P, N-(6-Cyano-8-nitro-chroman-3-yl)methanesulfonamide 757956-69-7P, N-Benzyl-N-(6-cyano-8-nitro-chroman-3-yl)methanesulfonamide 757956-70-0P, N-(8-Amino-6-cyano-chroman-3-yl)-N-benzylmethanesulfonamide 757956-71-1P, N-(6-Bromo-8-formyl-chroman-3-yl)methanesulfonamide 757956-72-2P, N-Benzyl-N-(6-bromo-8-formyl-chroman-3-yl)methanesulfonamide 757956-73-3P, N-Benzyl-N-(6-cyano-8-formyl-chroman-3-yl)methanesulfonamide 757956-74-4P, N-(6-Cyano-8-nitro-chroman-3-yl)-N-(thiophene-3-ylmethyl)methanesulfonamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted N-(chroman-3-yl)methanesulfonamides as inhibitors of farnesyl protein transferase for treating cancer)

RN 757956-68-6 CAPLUS
CN Methanesulfonamide, N-(6-cyano-3,4-dihydro-8-nitro-2H-1-benzopyran-3-yl)- (9CI) (CA INDEX NAME)

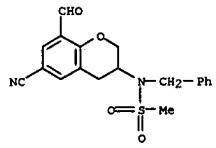


RN 757956-69-7 CAPLUS
CN Methanesulfonamide, N-(6-cyano-3,4-dihydro-8-nitro-2H-1-benzopyran-3-yl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

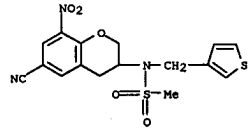
L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



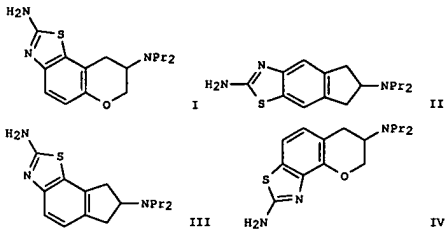
RN 757956-73-3 CAPLUS
CN Methanesulfonamide, N-(6-cyano-8-formyl-3,4-dihydro-2H-1-benzopyran-3-yl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 757956-74-4 CAPLUS
CN Methanesulfonamide, N-(6-cyano-3,4-dihydro-8-nitro-2H-1-benzopyran-3-yl)-N-(3-thienylmethyl)- (9CI) (CA INDEX NAME)



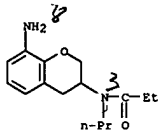
L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:597952 CAPLUS
DOCUMENT NUMBER: 133:321823
TITLE: Thiazoloindans and thiazolobenzopyrans: a novel class of orally active central dopamine (partial) agonists
AUTHOR(S): van Vliet, L. Alexander; Rodenhuis, Nienke; Wikstroem, Hkan; Pugsley, Thomas A.; Serpa, Kevin A.; Meltzer, Leonard T.; Heffner, Thomas G.; Wise, Lawrence D.; Lajiness, Mary E.; Huff, Rita M.; Svensson, Kjell; Haenen, Guido R. M. M.; Bast, Aalt
CORPORATE SOURCE: Department of Medicinal Chemistry University Centre for Pharmacy, University of Groningen, Groningen, NL-9713 AV, Neth.
SOURCE: Journal of Medicinal Chemistry (2000), 43(19), 3549-3557
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



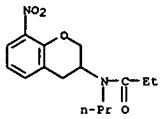
I II III IV

AB The 2-aminothiazole moiety has proven its value in medicinal chemical as a stable and lipophilic bioisosteric replacement of a phenol group. This approach has provided dopamine (DA) agonists with good oral availability. To further explore its use in the development of DA agonists, the authors have combined the 2-aminothiazole moiety with 2-aminoindans and 3-aminobenzopyrans, which are known templates for DA agonists. The authors have synthesized 6-amino-3-(N,N-di-n-propylamino)-3,4-dihydro-2H-thiazolo[5,4-f]-[1]benzopyran (I) and 6-amino-2-(N,N-di-n-propylamino)thiazolo[4,5-f]indan (II) and several analogs (such as III and IV). The affinity of the thiazolobenzopyrans and thiazoloindans for DA receptors was evaluated, which revealed compound II to have high affinity for DA D3 receptors. In addition, the compds. were screened for their

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
potential to inhibit lipid peroxidn., to det. their radical scavenging properties. I-III were subjected to further pharmacol. evaluation in a functional assay to det. intrinsic activity. II was also studied with microdialysis (to det. effects on DA turnover in striatum) and in unilaterally 6-OH-DA lesioned rats (to det. their potential as DA agonists). These studies selected II (GMC 1111) as particularly interesting. II caused a rotation activation in unilaterally 6-OH-DA lesioned rats and an increase in DA turnover in rat striatum. This dual agonist/antagonist action is best accounted for by its partial agonism at striatal DA D2 receptors. Interestingly, II displayed long-lasting activity and excellent oral availability in 6-OH-DA lesioned rats, making this compd. potentially useful for the treatment of Parkinson's disease.
IT **162742-29-2P 162742-30-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiazoloindans and thiazolobenzopyrans as a novel class of orally active central dopamine (partial) agonists)
RN 162742-29-2 CAPLUS
CN Propanamide, N-(8-amino-3,4-dihydro-2H-1-benzopyran-3-yl)-N-propyl- (9CI) (CA INDEX NAME)



RN 162742-30-5 CAPLUS
CN Propanamide, N-(3,4-dihydro-8-nitro-2H-1-benzopyran-3-yl)-N-propyl- (9CI) (CA INDEX NAME)



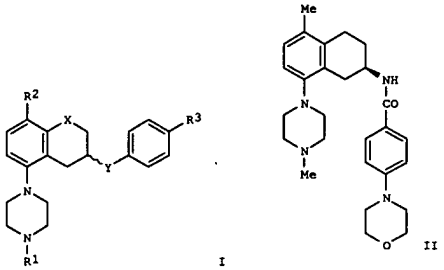
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:219987 CAPLUS
DOCUMENT NUMBER: 130:252383
TITLE: A combination of a monoamine oxidase inhibitor and a h5-HT1B antagonist or partial agonist [piperazinonaphthalene or -benzopyran derivative] for antidepressant therapy
INVENTOR(S): Berg, Stefan; Ross, Svante; Thorberg, Seth-Olov
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913878	A1	19990325	WO 1998-SE1602	19980909
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9807804	A	19990318	ZA 1998-7804	19980827
CA 2302204	AA	19990325	CA 1998-2302204	19980909
AU 9891931	A1	19990405	AU 1998-91931	19980909
AU 752719	B2	20020926		
EP 1014986	A1	20000705	EP 1998-944376	19980909
EP 1014986	B1	20040714		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9812236	A	20000718	BR 1998-12236	19980909
TR 200000725	T2	20000821	TR 2000-200000725	19980909
EE 200000146	A	20010215	EE 2000-200000146	19980909
JP 2001516719	T2	20011002	JP 2000-511500	19980909
AT 270889	E	20040715	AT 1998-944376	19980909
US 6159970	A	20001212	US 1998-171578	19981021
NO 2000001400	A	20000505	NO 2000-1400	20000317
PRIORITY APPLN. INFO.:			SE 1997-3376 A	19970918
			WO 1998-SE1602 W	19980909

OTHER SOURCE(S): MARPAT 130:252383
GI

L3 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

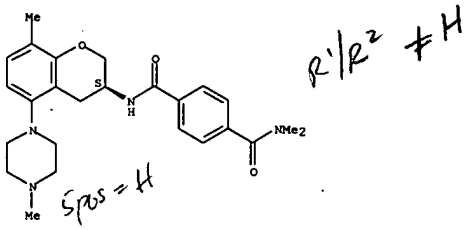


I II

AB The invention relates to a combination of a first component (a) which is a monoamine oxidase inhibitor (MAOI) and a second component (b) which is a selective h5-HT1B antagonist or partial agonist I [wherein X = CH2 or O; Y = CONH or NHCO; R1 = H, C1-6 alkyl, or C3-6 cycloalkyl; R2 = H, C1-6 alkyl, C1-6 alkoxy, or halo; R3 = morpholino, morpholinocarbonyl, 4-oxopiperidino, CF3, or CONR4R5; R4, R5 = H or C1-4 alkyl], as a racemate or either enantiomer, with said components (a) and (b) being in the form of free bases, solvates, or pharmaceutically acceptable salts. The invention also relates to their preparation, combination pharmaceutical formulations, use, a method of treating affective disorders such as depression, anxiety, and OCD using the combinations, as well as a kit containing the combinations. The combinations of the invention may afford a new route to faster onset of action in antidepressant therapy, and may also improve the efficacy of MAOIs. For instance, amidation of 4-morpholinobenzoic acid with (R)-2-amino-5-methyl-8-(4-methylpiperazin-1-yl)-1,2,3,4-tetrahydronaphthalene using 1,1'-carbonyldiimidazole in DMF gave 73% II. Using II as the h5-HT1B antagonist, and phenelzine as the MAOI, an almost 400% maximum increase in extracellular 5-HT was observed in the prefrontal cortex of guinea pigs, whereas phenelzine alone gave a maximum increase of approx. 225%.
IT **221185-27-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(h5-HT1B antagonist; preparation and/or therapeutic combination of selective 5-HT1A antagonists with selective h5-HT1B antagonists or partial agonists)
RN 221185-27-9 CAPLUS

L3 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN 1,4-Benzenedicarboxamide, N'-[(3S)-3,4-dihydro-8-methyl-5-(4-methyl-1-piperazinyl)-2H-1-benzopyran-3-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

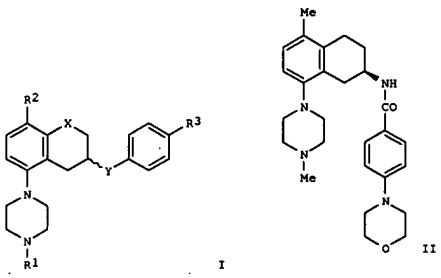
L3 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:219986 CAPLUS
DOCUMENT NUMBER: 130:252382
TITLE: A combination of a 5-HT reuptake inhibitor and a h5-HT1B antagonist or partial agonist [piperazinonaphthalene or -benzopyran derivative] for antidepressant therapy
INVENTOR(S): Berg, Stefan; Ross, Svante; Thorberg, Seth-Olov
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913877	A1	19990325	WO 1998-SE1601	19980909
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9807817	A	19990318	ZA 1998-7817	19980827
CA 2302382	AA	19990325	CA 1998-2302382	19980909
AU 9891930	A1	19990405	AU 1998-91930	19980909
AU 752722	B2	20020926		
EP 1014985	A1	20000705	EP 1998-944375	19980909
EP 1014985	B1	20030521		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200000727	T2	20000921	TR 2000-200000727	19980909
BR 9812088	A	20000926	BR 1998-12088	19980909
EE 200000141	A	20010215	EE 2000-200000141	19980909
EE 4141	B1	20031015		
JP 2001516718	T2	20011002	JP 2000-511499	19980909
NZ 503171	A	20020201	NZ 1998-503171	19980909
AT 240733	E	20030615	AT 1998-944375	19980909
RU 2214824	C2	20031027	RU 2000-109563	19980909
PT 1014985	T	20031031	PT 1998-944375	19980909
ES 2200370	T3	20040301	ES 1998-944375	19980909
US 6159971	A	20001212	US 1998-171580	19981021
NO 2000001399	A	20000510	NO 2000-1399	20000317
HK 1032739	A1	20031031	HK 2000-107438	20001121

PRIORITY APPLN. INFO.: SE 1997-3375 A 19970918
WO 1998-SE1601 W 19980909

OTHER SOURCE(S): MARPAT 130:252382
GI

L3 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



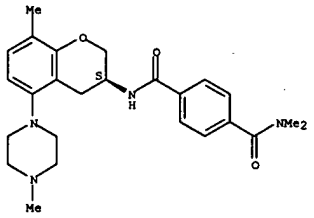
AB The invention relates to a combination of a first component (a) which is a 5-HT reuptake inhibitor (SSRI), and a second component (b) which is a selective h5-HT1B antagonist or partial agonist I [wherein X = CH2 or O; Y = CONH or NHCO; R1 = H, C1-6 alkyl, or C3-6 cycloalkyl; R2 = H, C1-6 alkyl, C1-6 alkoxy, or halo; R3 = morpholino, morpholinocarbonyl, 4-oxopiperidino, CF3, or CONR4R5; R4, R5 = H or C1-4 alkyl], as a racemate or either enantiomer, with said components (a) and (b) being in the form of free bases, solvates, or pharmaceutically acceptable salts. The invention also relates to their preparation, combination pharmaceutical formulations, use, a method of treating affective disorders such as depression, anxiety, and OCD using the combinations, as well as a kit containing the combinations. The combinations of the invention may afford a new route to faster onset of action in antidepressant therapy, and may improve the efficacy of SSRIs. For instance, amidation of 4-morpholinobenzoic acid with (R)-2-amino-5-methyl-8-(4-methylpiperazin-1-yl)-1,2,3,4-tetrahydronaphthalene using 1,1'-carbonyldiimidazole in DMF gave 73% II. Using II as the h5-HT1B antagonist, and citalopram as the 5-HT reuptake inhibitor, a 400% maximum increase in extracellular 5-HT was observed in the prefrontal cortex of guinea pigs, whereas citalopram alone gave a maximum increase of less than 250%.

IT 221185-27-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(h5-HT1B antagonist; preparation and/or therapeutic combination of 5-HT reuptake inhibitors with selective h5-HT1B antagonists or partial agonists)

L3 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 221185-27-9 CAPLUS
CN 1,4-Benzenedicarboxamide, N'-[(3S)-3,4-dihydro-8-methyl-5-(4-methyl-1-piperazinyl)-2H-1-benzopyran-3-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

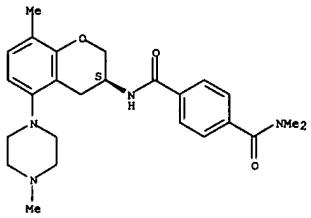
L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:219985 CAPLUS
DOCUMENT NUMBER: 130:252381
TITLE: A combination of a selective 5-HT1A antagonist [benzopyran derivative] and a selective h5-HT1B antagonist or partial agonist [piperazinonaphthalene or -benzopyran derivative] for antidepressant therapy
INVENTOR(S): Berg, Stefan; Ross, Svante; Thorberg, Seth-Olov
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913876	A1	19990325	WO 1998-SE1600	19980909
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9807810	A	19990218	ZA 1998-7810	19980827
TW 568786	B	20040101	TW 1998-87114345	19980829
CA 2302383	AA	19990325	CA 1998-2302383	19980909
AU 9891929	A1	19990405	AU 1998-91929	19980909
AU 752718	B2	20020926		
BR 9812234	A	20000718	BR 1998-12234	19980909
EP 1021183	A1	20000726	EP 1998-944374	19980909
EP 1021183	B1	20040317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200000734	T2	20001121	TR 2000-200000734	19980909
EE 200000143	A	20010215	EE 2000-200000143	19980909
EE 4142	B1	20031015		
JP 2001516717	T2	20011002	JP 2000-511498	19980909
NZ 503174	A	20020301	NZ 1998-503174	19980909
RU 2215528	C2	20031110	RU 2000-109558	19980909
AT 261728	E	20040415	AT 1998-944374	19980909
PT 1021183	T	20040730	PT 1998-944374	19980909
US 6159972	A	20001212	US 1998-171581	19981021
NO 2000001398	A	20000404	NO 2000-1398	20000317

PRIORITY APPLN. INFO.: SE 1997-3374 A 19970918
WO 1998-SE1600 W 19980909

OTHER SOURCE(S): MARPAT 130:252381
GI

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a combination of a first component (a) which is a selective 5-HT1A receptor antagonist I [wherein R1 = Pr or cyclobutyl, R2 = iso-Pr, tert-Bu, cyclobutyl, cyclopentyl, or cyclohexyl; R3 = H and R4 = H or Me], being in the (R)-enantiomer form, with a second component (b) which is a selective h5-HT1B antagonist or partial agonist II [wherein X = CH2 or O; Y = CONH or NHCO; R1 = H, C1-6 alkyl, or C3-6 cycloalkyl; R2 = H, C1-6 alkyl, C1-6 alkoxy, or halo; R3 = morpholino, morpholinocarbonyl, 4-oxopiperidino, CF3, or CONR4R5; R4, R5 = H or C1-4 alkyl], as a racemate or either enantiomer, with said components (a) and (b) being in the form of free bases, solvates, or pharmaceutically acceptable salts. The invention also relates to their preparation, combination pharmaceutical formulations, use, a method of treating affective disorders such as depression, anxiety, and OCD using the combinations, as well as a kit containing the combinations. The combinations of the invention may afford a new route to faster onset of action in antidepressant therapy. For instance, amidation of 4-morpholinobenzoic acid with (R)-2-amino-5-methyl-8-(4-methylpiperazin-1-yl)-1,2,3,4-tetrahydronaphthalene using 1,1'-carbonyldiimidazole in DMF gave 73% III. Using III as the h5-HT1B antagonist, and benzopyrancarboxamide derivative IV (tartrate salt) as the 5-HT1A antagonist, a synergistic increase in 5-HT turnover was obtained in 4 brain regions of guinea pigs, as compared with compound III alone.
IT **221185-27-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(h5-HT1B antagonist; preparation and/or therapeutic combination of selective 5-HT1A antagonists with selective h5-HT1B antagonists or partial agonists)
RN 221185-27-9 CAPLUS
CN 1,4-Benzenedicarboxamide, N'-[(3S)-3,4-dihydro-8-methyl-5-(4-methyl-1-piperazinyl)-2H-1-benzopyran-3-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

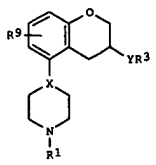
L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:216915 CAPLUS
DOCUMENT NUMBER: 130:223067
TITLE: Preparation of substituted chroman derivatives
INVENTOR(S): Berg, Stefan; Linderberg, Mats; Ross, Svante; Thorberg, Seth-Olov; Ulff, Bengt
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9914213	A1	19990325	WO 1998-SE1604	19980909
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9807806	A	19990318	ZA 1998-7806	19980827
CA 2303926	AA	19990325	CA 1998-2303926	19980909
AU 9891933	A1	19990405	AU 1998-91933	19980909
BR 9812239	A	20000718	BR 1998-12239	19980909
EP 1025096	A1	20000809	EP 1998-944378	19980909
EP 1025096	B1	20031126		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200000737	T2	20000921	TR 2000-200000737	19980909
EE 200000144	A	20010215	EE 2000-200000144	19980909
JP 2001516755	T2	20011002	JP 2000-511762	19980909
AT 255099	E	20031215	AT 1998-944378	19980909
US 6387899	B1	20020514	US 1998-171572	19981021
HR 2000000133	A1	20011231	HR 2000-133	20000309
NO 2000001403	A	20000518	NO 2000-1403	20000317
US 6384225	B1	20020507	US 2000-653552	20000831

PRIORITY APPLN. INFO.: SE 1997-3378 A 19970918
WO 1998-SE1604 W 19980909
US 1998-171572 A3 19981021

OTHER SOURCE(S): MARPAT 130:223067
GI

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



I

AB Title compds. [I; X is N or CH; Y is NR2CH2, CH2NR2, NR2CO, CONR2, NR2SO2;
R2 is H or C1-C6 alkyl; R1 is H, C1-C6 alkyl or C3-C6 cycloalkyl; R3 is C1-C6 alkyl, C3-C6 cycloalkyl, (CH2)n-aryl; aryl is Ph or a heteroarom. ring containing one or two heteroatoms selected from N, O and S and which may
be mono- or di-substituted; n is 0-4; R9 is C1-C6 alkyl, C3-C6 cycloalkyl,
OCF3, OCHF2, OCH2F, halogen, CONR6R7, CN, CF3, OH, C1-C6 alkoxy, NR6R7, SO3CH3, SO3CF3, SO2NR6R7, an unsubstituted or substituted heterocyclic or heteroarom. ring containing one or two heteroatoms selected from N and O, wherein the substituent(s) is(are) C1-C6 alkyl, COR8; R6, R7 and R8 are as
defined above], as (R)-enantiomers, (S)-enantiomers or racemates in the form of a free base or pharmaceutically acceptable salts or solvates thereof are prepared via acylation and alkylation; pharmaceutical compns. containing said therapeutically active compds. and to the use of said active
compds. in therapy are included. (S)-N-[8-methyl-5-(4-methylpiperazin-1-yl)-3,4-dihydro-2H-1-benzopyran-3-yl]-4-(dimethylaminocarbonyl)benzamide was prepared

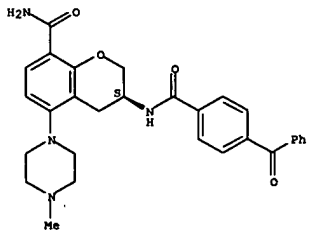
IT **221185-24-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted chroman derivs.)

RN 221185-24-6 CAPLUS

CN 2H-1-Benzopyran-8-carboxamide, 3-[(4-benzoylbenzoyl)amino]-3,4-dihydro-5-(4-methyl-1-piperazinyl)-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

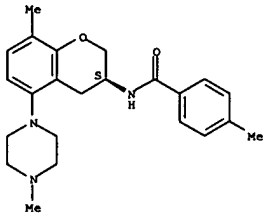


IT **221185-17-7P 221185-27-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of substituted chroman derivs.)

RN 221185-17-7 CAPLUS

CN Benzamide, N-[(3S)-3,4-dihydro-8-methyl-5-(4-methyl-1-piperazinyl)-2H-1-benzopyran-3-yl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

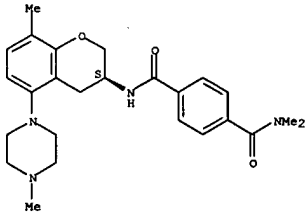


RN 221185-27-9 CAPLUS

CN 1,4-Benzenedicarboxamide, N'-[(3S)-3,4-dihydro-8-methyl-5-(4-methyl-1-piperazinyl)-2H-1-benzopyran-3-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:170576 CAPLUS

DOCUMENT NUMBER: 130:252661

TITLE: A "cephalosporin-like" cyclic depsipeptide: synthesis and reaction with β-lactam-recognizing enzymes

AUTHOR(S): Adediran, S. A.; Cabaret, D.; Pratt, R. F.; Wakselman, M.

CORPORATE SOURCE: Department of Chemistry, Wesleyan University, Middletown, CT, 06459, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(3), 341-346
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

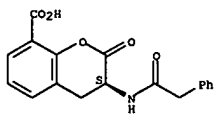
AB The cyclic depsipeptide analog, 8-carboxy-3-phenylacetamido-3,4-dihydro-2H-1-benzopyran-2-one (I), a cyclic analog of aryl phenaceturates with structural similarity to cephalosporins, has been synthesized as a potential substrate/inhibitor of β-lactam-recognizing enzymes. I was found to be a tight-binding, poor substrate of class A β-lactamases and an irreversible inhibitor of several DD-peptidases.

IT **221646-24-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of (carboxy)phenylacetamidobenzopyranone and its interaction
with β-lactam-recognizing enzymes)

RN 221646-24-8 CAPLUS

CN 2H-1-Benzopyran-8-carboxylic acid, 3,4-dihydro-2-oxo-3-[(phenylacetyl)amino]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



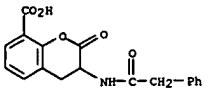
$R^1 / R^2 \neq H$ $R^8 = X \neq$ C-NH(R) ‖ O

IT **221646-17-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of (carboxy)phenylacetamidobenzopyranone and its interaction
with β-lactam-recognizing enzymes)

RN 221646-17-9 CAPLUS

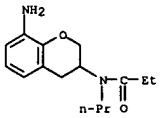
CN 2H-1-Benzopyran-8-carboxylic acid, 3,4-dihydro-2-oxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

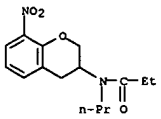


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L3 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of benzindoles and related compds. having dopaminergic activity)
RN 162742-29-2 CAPLUS
CN Propanamide, N-(8-amino-3,4-dihydro-2H-1-benzopyran-3-yl)-N-propyl- (9CI) (CA INDEX NAME)



RN 162742-30-5 CAPLUS
CN Propanamide, N-(3,4-dihydro-8-nitro-2H-1-benzopyran-3-yl)-N-propyl- (9CI) (CA INDEX NAME)

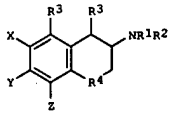


L3 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:436581 CAPLUS
DOCUMENT NUMBER: 127:108839
TITLE: Preparation of benzindoles and related compounds having dopaminergic activity.
INVENTOR(S): Andersson, Bengt R.; Carlsson, Per A. E.; Hansson, Lars O.; Sonesson, Clas A.; Stjernlof, N. Peter; Svensson, Kjell A. I.; Waters, R. Nicholas; Haadsma-Svensson, Susanne R.
PATENT ASSIGNEE(S): Pharmacia & Upjohn Co., USA
SOURCE: U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 37,568, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5639778	A	19970617	US 1995-522290	19950907
WO 9421608	A1	19940929	WO 1994-US2800	19940321
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, TJ, TT, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1993-37568 B2 19930325
WO 1994-US2800 W 19940321

OTHER SOURCE(S): MARPAT 127:108839
GI



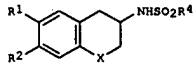
AB Title compds. [I; if Z = R3 then XY = CR5:CR6NH, or if X = R3 then YZ = CR5:CR6NH, NHCR5:CR6; R1, R2 = H, alkyl, cycloalkyl, cycloalkylmethyl, (halo- or alkyl-substituted) Ph, thienyl, alkylphenyl; R3 = H, halo, alkyl, alkoxy; R4 = bond, CH2, O; R5, R6 = H, S, alkylthio, halo, CON(R3)2, COCF3, alkylcarbonyl, PhCO, O, CHO, CN except that when YZ = NHCR5:CR6, then R1, R2 = H, alkyl and R3 = H, then ≥1 of R5, R6 must be other than H], were prepared Thus, 7-dipropylamino-6,7,8,9-tetrahydro-3H-benzo[e]indole-1-carbonitrile (preparation given) bound to dopamine D2 receptors with Ki = 10.1 nM.
IT **162742-29-2P 162742-30-5P**

L3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:708547 CAPLUS
DOCUMENT NUMBER: 123:111683
TITLE: Preparation of 1,2,3,4-tetrahydronaphthalene and chroman and thiochroman antithrombotic agents
INVENTOR(S): Lavielle, Gilbert; Dubuffet, Thierry; Muller, Olivier; Laubie, Michel; Verbeuren, Tony; Simonet, Serge; Descombes, Jean-Jacques
PATENT ASSIGNEE(S): Adir et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 37 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 648741	A1	19950419	EP 1994-402299	19941013
EP 648741	B1	19961218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2711139	A1	19950421	FR 1993-12237	19931015
FR 2711139	B1	19951201		
CA 2118102	AA	19950416	CA 1994-2118102	19941013
CA 2118102	C	20001107		
AU 9475820	A1	19950511	AU 1994-75820	19941013
AU 676377	B2	19970306		
AT 146454	E	19970115	AT 1994-402299	19941013
ES 2098109	T3	19970416	ES 1994-402299	19941013
ZA 9408082	A	19950605	ZA 1994-8082	19941014
JP 07188155	A2	19950725	JP 1994-249589	19941014
JP 2859138	B2	19990217		
US 5472979	A	19951205	US 1994-323508	19941014

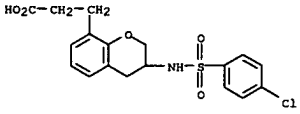
PRIORITY APPLN. INFO.: FR 1993-12237 A 19931015

OTHER SOURCE(S): MARPAT 123:111683
GI

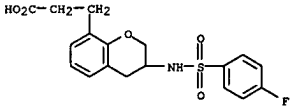


AB The title compds. [I; R1, R2 = H, halogen, (un)branched alkyl, (un)substituted Ph, PhCH2, pyridylmethyl, imidazolylmethyl, thiazolylmethyl, pyridyl, imidazolyl, thiazolyl; R3 = OH, (un)branched alkoxy, (un)substituted NH2, etc; R4 = (un)branched alkyl, (un)substituted Ph, naphthyl, pyridyl, thienyl, thiazolyl; X = CH2, O, S], useful as thromboxane A2 receptor antagonists and antithrombotics, are prepared and a I-containing formulation presented. Thus, Na 3-[6-[(4-chlorophenylsulfonyl)amino]-5,6,7,8-tetrahydronaphth-1-yl]propionate, prepared from PhCH2COCl in 6 steps, demonstrated a IC50 of 0.003 μM for the inhibition of adrenaline-induced dog blood platelet aggregation, vs.

L3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
0.110 μM for BAY-u 3405.
IT **165537-83-7P 165537-84-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1,2,3,4-tetrahydronaphthalene and chroman and thiochroman
antithrombotic agents)
RN 165537-83-7 CAPLUS
CN 2H-1-Benzopyran-8-propanoic acid, 3-[[(4-chlorophenyl)sulfonyl]amino]-3,4-dihydro- (9CI) (CA INDEX NAME)

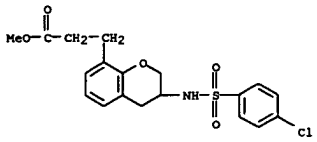


RN 165537-84-8 CAPLUS
CN 2H-1-Benzopyran-8-propanoic acid, 3-[[(4-fluorophenyl)sulfonyl]amino]-3,4-dihydro- (9CI) (CA INDEX NAME)



IT **165538-37-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 1,2,3,4-tetrahydronaphthalene and chroman and thiochroman
antithrombotic agents from)
RN 165538-37-4 CAPLUS
CN 2H-1-Benzopyran-8-propanoic acid, 3-[[(4-chlorophenyl)sulfonyl]amino]-3,4-dihydro-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



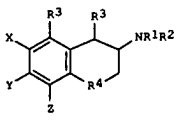
L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:520315 CAPLUS
DOCUMENT NUMBER: 123:55692
TITLE: Indoletetralins having dopaminergic activity
INVENTOR(S): Andersson, Bengt Ronny; Carlsson, Per Arvid Emil; Hansson, Lars Olov; Sonesson, Clas Ake; Stjernlof, Nils Peter; Svensson, Kjell Anders Ivan; Waters, Ross Nicholas; Haadsma-svensson, Susanne R.
PATENT ASSIGNEE(S): Upjohn Co., USA
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

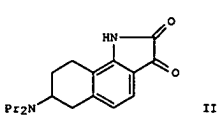
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9421608	A1	19940929	WO 1994-US2800	19940321
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, TJ, TT, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2157586	AA	19940929	CA 1994-2157586	19940321
AU 9464086	A1	19941011	AU 1994-64086	19940321
AU 679053	B2	19970619		
EP 690843	A1	19960110	EP 1994-911606	19940321
EP 690843	B1	20000830		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08508251	T2	19960903	JP 1994-521189	19940321
JP 3298885	B2	20020708		
AT 195935	E	20000915	AT 1994-911606	19940321
ES 2149869	T3	20001116	ES 1994-911606	19940321
PT 690843	T	20010131	PT 1994-911606	19940321
US 5639778	A	19970617	US 1995-522290	19950907
GR 3034906	T3	20010228	GR 2000-402612	20001124
LV 12792	B	20020620	LV 2001-129	20010830

PRIORITY APPLN. INFO.: US 1993-37568 A 19930325
WO 1994-US2800 W 19940321

OTHER SOURCE(S): MARPAT 123:55692
GI

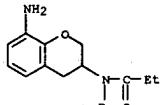


I

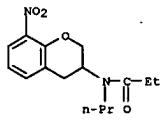


II

L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
AB The 3-aminotetralins and 3-aminocoumarins I (R1, R2 = alkyl, cycloalkyl, etc.; R3 = H, halo, alkyl, etc.; R4 = methine, oxygen; X, Y, Z form fused ring system) were disclosed. I have dopamine-receptor stimulating activity and are thus useful for treatment of hyperprolactinemia, galactorrhea, amenorrhea, impotence, Parkinsonism, diabetes, acromegaly, hypertension and other central nervous system disorders which respond to dopamine-receptor stimulation. An example compound, 7-(dipropylamino)-6,7,8,9-tetrahydro-1H-benz[g]indole-2,3-dione (II) was prepared
IT **162742-29-2P 162742-30-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of dopamine agonists naphthofuranamines benzindolamines pyranoindolamines)
RN 162742-29-2 CAPLUS
CN Propanamide, N-(8-amino-3,4-dihydro-2H-1-benzopyran-3-yl)-N-propyl- (9CI) (CA INDEX NAME)



RN 162742-30-5 CAPLUS
CN Propanamide, N-(3,4-dihydro-8-nitro-2H-1-benzopyran-3-yl)-N-propyl- (9CI) (CA INDEX NAME)



L3 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:534541 CAPLUS
DOCUMENT NUMBER: 121:134541
TITLE: Preparation of camptothecin derivatives as antitumor agents
INVENTOR(S): Terasawa, Hirofumi; Sato, Keiki; Mitsui, Ikuo
PATENT ASSIGNEE(S): Daiichi Seiyaku Co, Japan; Yakult Honsha Kk
SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

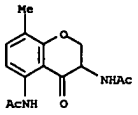
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06087746	A2	19940329	JP 1993-177010	19930716
JP 3359955	B2	20021224		
PRIORITY APPLN. INFO.:			JP 1992-189654 A1	19920716

OTHER SOURCE(S): MARPAT 121:134541
GI

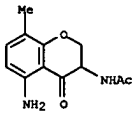
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I [R1, R2 = H, hydroxy, (subsitituted) alkyl, etc.; R3 = alkyl; R4 = H, (protected) amino, etc.; Z = O, S, etc.; m, n = 0 - 2] are prepared Title compound II HCl salt (R1 = R2 = H) (preparation given) was isolated as isomer A , [α]D = +178°, and isomer B, [α]D = -38°. Said isomer A in vitro showed IC50 of 3.38 ng/mL against P388 mouse leukemic cells. Said isomer B in vitro showed IC50 of 12.40 ng/mL against P388 mouse leukemic cells. Title compound II HCl salt (R1 = Me; R2 = F) in vitro showed IC50 of 0.58 ng/mL against P388 mouse leukemic cells. Title compound II HCl salt (R1 = Me; R2 = F) at 12.5 mg/Kg i. v. gave 56.5% inhibition of tumor in mice with transplanted Meth A tumor.
IT **143655-28-1P 143655-29-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of antitumor agent)
RN 143655-28-1 CAPLUS
CN Acetamide, N,N'-(3,4-dihydro-8-methyl-4-oxo-2H-1-benzopyran-3,5-diyl)bis- (9CI) (CA INDEX NAME)

L3 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 143655-29-2 CAPLUS
CN Acetamide, N-(5-amino-3,4-dihydro-8-methyl-4-oxo-2H-1-benzopyran-3-yl)- (9CI) (CA INDEX NAME)

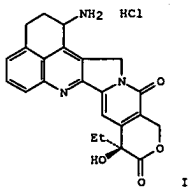


L3 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:234316 CAPLUS
DOCUMENT NUMBER: 118:234316
TITLE: hexacyclic compounds, e.g., (9S)-1-amino-9-ethyl-2,3-dihydro-9-hydroxy-1H,2H-benzo[de]pyrano[3',4':6,7]indolizino[1,2-b]quinoline-10,13(9H,15H)-dione, methods for their preparation and their use as neoplasm inhibitors
INVENTOR(S): Terasawa, Hirofumi; Ejima, Akio; Ohsuki, Satoru; Uoto, Kouichi
PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan; Kabushiki Kaisha Yakult Honsha
SOURCE: Eur. Pat. Appl., 77 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 495432	A1	19920722	EP 1992-100449	19920113
EP 495432	B1	19960529		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
JP 05059061	A2	19930309	JP 1991-320688	19911204
JP 3008226	B2	20000214		
AT 138661	E	19960615	AT 1992-100449	19920113
ES 2090366	T3	19961016	ES 1992-100449	19920113
CA 2059305	AA	19920717	CA 1992-2059305	19920114
CA 2059305	C	20010731		
AU 9210185	A1	19920723	AU 1992-10185	19920114
AU 640549	B2	19930826		
NO 9200201	A	19920717	NO 1992-201	19920115
NO 180448	B	19970113		
NO 180448	C	19970423		
RU 2071476	C1	19970110	RU 1992-5010678	19920115
FI 9200194	A	19920717	FI 1992-194	19920116
US 6407115	B1	20020618	US 1995-451993	19950526
US 5637770	A	19970610	US 1995-455718	19950531
US 5658920	A	19970819	US 1995-455706	19950531
US 5770605	A	19980623	US 1997-811239	19970303
US 5834476	A	19981110	US 1997-989420	19971212
PRIORITY APPLN. INFO.:			JP 1991-15812 A	19910116
			US 1992-820232 B1	19920114
			US 1992-967130 B1	19921027
			US 1993-112230 B1	19930827
			US 1994-274143 B3	19940714
			US 1995-455706 A1	19950531
			US 1997-811239 A1	19970303

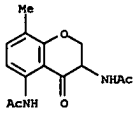
OTHER SOURCE(S): CASREACT 118:234316; MARPAT 118:234316
GI

L3 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



I

AB Certain hexacyclic compds., such as (9S,1R)- and (9S,1S)-1-amino-9-ethyl-2,3-dihydro-9-hydroxy-1H,2H-benzo[de]pyrano[3',4':6,7]indolizino[1,2-b]quinoline-10,13(9H,15H)-dione hydrochloride (I), are claimed. I is a camptothecin analog. I had antineoplastic activity against P388 murine leukemia cells.
IT **143655-28-1P 143655-29-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for pyranoindolizinoquinolinedione)
RN 143655-28-1 CAPLUS
CN Acetamide, N,N'-(3,4-dihydro-8-methyl-4-oxo-2H-1-benzopyran-3,5-diyl)bis- (9CI) (CA INDEX NAME)



RN 143655-29-2 CAPLUS
CN Acetamide, N-(5-amino-3,4-dihydro-8-methyl-4-oxo-2H-1-benzopyran-3-yl)- (9CI) (CA INDEX NAME)